



AVOX Systems

SERVICE INFORMATION LETTER

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OXYGEN - ATA CHAPTER 35

VENDOR CODE: 53655

TEST DATA SHEET FOR P/N 5500/5600 Series Portable Cylinder Assembly

1. BACKGROUND

- A. CMM 35-32-18 specifies the tests that must be passed in order to return a unit to service. This SIL provides a standardized form on which to record the results of the required functional tests. This form will be incorporated into the CMM at the next revision.
- B. You are authorized to copy the form on pages 2 thru 4. If you copy the form on pages 2 thru 4, you must copy all of the form.
- C. Use this form only for the AVOX Systems components printed on the form. Do not use this form for any other AVOX Systems components or for any components of another company.

2. EFFECTIVITY

- A. Aircraft
The Test Data Sheets on pages 2 thru 4 can be used for all units whether removed from any aircraft or from spares inventory.
- B. This SIL applies to all Portable Cylinder Assemblies in the 5500/5600 Series.

3. MATERIALS

The only material required by this SIL is the Test Data Sheet on pages 2 thru 4.

4. ACCOMPLISHMENT OF SIL

- A. Make complete copies of the Test Data Sheet on pages 2 thru 4.
- B. Use a copy of the Test Data Sheet from pages 2 thru 4 to record the results of tests whenever a P/N 5500/5600 Series Portable Cylinder Assembly is tested.

5. TO CONTACT AVOX SYSTEMS:

Use the contact information below to get a copy of a CMM or the revision status of a publication. Give the AVOX Systems part number and the aircraft model when you request a CMM copy.

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CMM 35-32-18
TEST DATA SHEET A
5500/5600 Series Portable Cylinder Assembly

Tested by: _____

Date: _____

Part Number: 5500-_____

Inspected by: _____

Date: _____

Part Number: 5600-_____

Serial Number: _____

Refer to the **CHECK** section and Paragraphs 5 thru 11 in the **TESTING AND FAULT ISOLATION** section of CMM 35-32-18.

1. Visual Inspection

Refer to the **CHECK** section for cylinder service life and the hydrostatic test frequency requirements. Check the condition of cylinder surfaces for heat or fire damage, dents, gouges, cracks, distortion, or thread damage. Verify that any parts that are no longer serviceable have been replaced.

☐ FAIL	PASS ☐
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5. Relief Valve Assembly Tests**A. thru C. Leakage, Flow and Pressure to Close Tests**

Perform a leakage, flow, and pressure to close test.

Inlet Pressure psig (Mpa)	No Leakage from Relief Valve	Inlet Pressure psig (Mpa)	Relief Valve Flows Oxygen	Inlet Pressure psig (Mpa)	Valve Reseats & No Leakage from Relief Valve
90 (0.62)	☐ FAIL PASS ☐	135 (0.93)	☐ FAIL PASS ☐	89 (0.61)	☐ FAIL PASS ☐

6. Outlet Assembly Test Procedures**A. Full Flow Test (Non-Metered)**

Inlet Pressure psig(MPa)	0 Leakage Allowed	Inlet Pressure psig (Mpa)	Connector Freely Engages. Repeat 5 Times.
125 (0.86)	☐ FAIL PASS ☐	55±2 (0.38±0.014)	☐ FAIL PASS ☐

6. Outlet Assembly Test Procedures**B. thru C. Constant Flow Test (Metered) "Precision"**

Inlet Pressure psig (Mpa)	0 Leakage Allowed	Inlet Pressure psig (Mpa)	Flow Rate per Table 1004	Inlet Pressure psig (Mpa)	Connector Freely Engages. Repeat 5 Times.
55±2 (0.38±0.014)	☐ FAIL PASS ☐	55±2 (0.38±0.014)	☐ FAIL PASS ☐	55±2 (0.38±0.014)	☐ FAIL PASS ☐

6. Outlet Assembly Test Procedures**D. Constant Flow Test (Metered) "Adjustable"**

Inlet Pressure psig (Mpa)	0 Leakage Allowed	Inlet Pressure psig (Mpa)	Flow Rate per Table 1005	Inlet Pressure psig (Mpa)	Connector Freely Engages. Repeat 5 Times.
55±2 (0.38±0.014)	☐ FAIL PASS ☐	55±2 (0.38±0.014)	☐ FAIL PASS ☐	55±2 (0.38±0.014)	☐ FAIL PASS ☐

7. Respirator Regulator Test Procedures**A. Demand Valve Assembly Leakage Test**

Inlet Pressure psig (Mpa)	10 cc/min. Allowed MAX
35 (0.24)	☐ FAIL PASS ☐
75 (0.52)	☐ FAIL PASS ☐

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
 APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
 MEDIUM IS USED.



CMM 35-32-18
TEST DATA SHEET B
5500/5600 Series Portable Cylinder Assembly

Tested by: _____

Date: _____

Part Number: 5500- _____

Inspected by: _____

Date: _____

Part Number: 5600- _____

Serial Number: _____

7. Respirator Regulator Test Procedures
B. thru C. Inward & Outward Leakage Test

Applied Pressure in. WC	100 cc/min. Allowed MAX
-1	☐ FAIL ☐ PASS ☐
+12	☐ FAIL ☐ PASS ☐

7. Respirator Regulator Test Procedures
D.(1) Flow Test, (Demand Type Respirator Regulators)

Reg Inlet Pressure psig (MPa)	Reg Outlet Flow Rate lpm	MAX Outlet Suction Press In. WC	
40 (0.28)	20 70 100	-0.75 -1.55 -2.00	☐ FAIL ☐ PASS ☐
60 (0.41)	20 70 100	-0.75 -1.55 -2.00	☐ FAIL ☐ PASS ☐

7. Respirator Regulator Test Procedures
D.(2) Flow Test, (Pressure-Demand Type Respirator Regulators)

Reg Inlet Pressure psig (MPa)	Reg Outlet Flow Rate lpm	Allowable Outlet Press in. WC	
40 (0.28)	20 100 0.01	+0.5 to +2.0 +0.5 to +2.0 +0.5 to +2.5	☐ FAIL ☐ PASS ☐
60 (0.41)	20 100 0.01	+0.5 to +2.0 +0.5 to +2.0 +0.5 to +2.5	☐ FAIL ☐ PASS ☐

8. Regulator Assembly Outlet Pressure Test

Inlet Pressure psig (MPa)	Outlet Assemblies Flow (lpm)	Reg. Outlet Pressure psig (MPa)		Repeated Test After 24 Hours
1800 (12.4)	4.0	55±2 (0.38±0.014)	☐ FAIL ☐ PASS ☐	☐ FAIL ☐ PASS ☐
1800 (12.4)	0.0	75 MAX (0.52)	☐ FAIL ☐ PASS ☐	☐ FAIL ☐ PASS ☐

9. Pressure Gauge Accuracy Test

Inlet Pressure psig (MPa)	Observed Gauge Pressure Actual ±100 psig (±0.69 MPa)
1800 (12.4)	☐ FAIL ☐ PASS ☐
1000 (6.89)	☐ FAIL ☐ PASS ☐
0 (0)	☐ FAIL ☐ PASS ☐

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
 APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
 MEDIUM IS USED.



CMM 35-32-18
TEST DATA SHEET C
5500/5600 Series Portable Cylinder Assembly

Tested by: _____

Date: _____

Part Number: 5500-_____

Inspected by: _____

Date: _____

Part Number: 5600-_____

Serial Number: _____

10. Valve Torque Test

Inlet Pressure psig (MPa)	16.0 in•lbs (1.8 N•m) Torque MAX Open/Close	Mating Connector Leakage 5 cc/hour MAX
1850 (12.8)	☐ FAIL ☐ PASS	☐ FAIL ☐ PASS

11. Portable Cylinder Assembly (PCA) Test Procedure
A. External Leakage Test

Inlet Pressure psig (MPa)	0 Leakage Allowed	After 24 Hours 0 Leakage Allowed
1850 (12.8)	☐ FAIL ☐ PASS	☐ FAIL ☐ PASS

11. Portable Cylinder Assembly (PCA) Test Procedure
B. Functional Test

Inlet Pressure (psig / MPa)	O ₂ Flows to Mask Assembly
1850 (12.8)	☐ FAIL ☐ PASS

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
MEDIUM IS USED.